

CLAIMS

What is claimed and desired to be secured by Letters Patent is as follows:

1. A method for sharing data between at least first and second redirection processors, at least said first redirection processor associated with an application server, the method comprising the steps of:
 - (a) collecting server statistics from the application server with said first redirection processor; and
 - (b) sending information responsive to the server statistics from said first redirection processor to said second redirection processor, wherein said second redirection processor is located at a geographically disparate location from said first redirection processor.
2. The method of Claim 1 wherein the step (a) comprises collecting Simple Network Management Protocol (SNMP) Management Information Base (MIB) information associated with data selected from the group of: availability, processor usage, data storage usage and combinations thereof.
3. The method of Claim 1 wherein the step (b) comprises sending at least a first variable that is a function of the server statistics.
4. The method of Claim 3 wherein the step (b) comprises applying weighting factors to the server statistics.

5. The method of Claim 1 further comprising the step (c) of directing Internet Protocol (IP) traffic with the first redirection processor.
6. The method of Claim 1 further comprising the step (c) of directing Internet Protocol (IP) traffic with the second redirection processor, the second redirection processor associated with a network access point.
7. The method of Claim 1 wherein the step (b) comprises sending the information in response to a query from the second redirection processor.
8. The method of Claim 7 wherein the step (b) comprises sending the information to the second redirection processor, the second redirection processor assigned to receive the information from the first redirection processor.
9. The method of Claim 1 wherein the step (b) comprises broadcasting the information in a Transmission Control Protocol (TCP) format to a plurality of redirection processors, including the second redirection processor.
10. The method of Claim 1 wherein the step (b) comprises broadcasting the information in a User Datagram Protocol (UDP) format to a plurality of redirection processors, including the second redirection processor.

11. A network for sharing load distribution data, the network comprising:
 - at least first and second application servers, the first and second application servers applying, in part, substantially the same application;
 - a first redirection processor operatively connected to the first and second application servers, the first redirection processor operable to collect server statistics from the first and second application servers;
 - a second redirection processor located at a geographically disparate location from the first redirection processor, said second redirection processor operatively connected to the first redirection processor; and
 - wherein the first redirection processor is operable to send information responsive to the server statistics to said second redirection processor.
12. The network of Claim 11 wherein the server statistics comprise Simple Network Management Protocol (SNMP) Management Information Base (MIB) information associated with data selected from the group of: availability, processor usage, data storage usage and combinations thereof.
13. The network of Claim 11 wherein the information responsive to the server statistics comprises at least a first variable that is a function of the server statistics.
14. The method of Claim 13 wherein the variable comprises a variable that is a function of weighting factors applied to the server statistics.

15. The network of Claim 11 wherein the first and second redirection processors are operable to direct Internet Protocol (IP) traffic, the second redirection processor associated with a network access point.

16. The network of Claim 11 wherein the first redirection processor is operable to send the information in response to a query from the second redirection processor.

17. The network of Claim 16 wherein the first redirection processor is operable to send the information to the second redirection processor, the second redirection processor assigned to receive the information from the first redirection processor.

18. The network of Claim 11 wherein the first redirection processor is operable to broadcast the information in a Transmission Control Protocol (TCP) format to a plurality of redirection processors, including the second redirection processor.

19. The network of Claim 11 wherein the first redirection processor is operable to broadcast the information in a User Datagram Protocol (UDP) format to a plurality of redirection processors, including the second redirection processor.

20. A data information network for providing network processing associated with a plurality of users, the network comprising:

- (a) at least first and second processors at a substantially same geographic location applying substantially the same application and operating at substantially the same time;
- (b) a first load processor operatively connected to the first and second processors;
- (c) a second load processor located at a geographically disparate location from the first load processor, said second load processor operable to receive load information from the first load processor; and
- (d) wherein the first load processor is operative to distribute requests from any one of the plurality of users received by the data information network to one of the first and second processors in response to said load information.

21. The network of Claim 20 further comprising at least two data storage devices storing mirrored data associated with the application, said at least two data storage devices operatively connected to each of said first and second processors.

22. The network of Claim 20 wherein said second load processor is operative at a same time as said first load processor.

23. The network of Claim 20 wherein the load information comprises information from the first and second processors selected from the group of: availability, processor usage, data storage usage and combinations thereof.

24. The network of Claim 23 wherein the load information comprises Management Information Base (MIB) data.

25. The network of Claim 23 wherein the first and second load processors are operable to apply weighting factors to said load information; and wherein said distribution is responsive, in part, to said weighting factors.

26. The network of Claim 20 wherein the first load processor is further operative to provide said load information to at least a third load processor, the third load processor associated with a network access point.

27. The network of Claim 26 wherein the load information is a variable provided in response to a means selected from the group of: means for sending said load information in a Transmission Control Protocol format, means for sending said load information in a User Datagram Protocol format, and combinations thereof.

28. A method of providing Internet or Intranet processing and stored data access associated with a plurality of users in a data information network, the method comprising the steps of:

- (a) applying substantially the same application associated with a plurality of users in at least first and second processors, the first and second processors located at a substantially the same geographic location;
- (b) operating the first and second processors at substantially the same time;
- (c) collecting load information from said first and second processors with a first load processor;
- (d) providing a second load processor located at a geographically disparate location from the first load processor, said second load processor operable to receive said load information from the first load processor; and
- (e) distributing requests from any one of the plurality of users received by the data information network to one of the first and second processors in response to said load information residing on said first and second load processors.

29. The method of Claim 28 further comprising the step (f) of storing mirrored data associated with the application in at least two data storage devices, said at least two data storage devices operatively connected to each of said first and second processors.

30. The method of Claim 28 wherein the step (d) comprises operating the second load processor at a same time as and in parallel to said first load processor.

31. The method of Claim 28 wherein said load information comprises information selected from the group of: availability, processor usage, data storage usage and combinations thereof.

32. The method of Claim 31 wherein said load information comprises Management Information Base (MIB) data.

33. The method of Claim 31 wherein the step (e) comprises applying weighting factors to said load information.

34. The method of Claim 28 further comprising the step (f) of providing said load information to at least third and fourth load processors in IP traffic data paths, the third and fourth load processors associated with first and second network points, respectively.

35. The method of Claim 34 wherein the step (f) comprises providing the load information as a variable with a method selected from the group of:

- (e1) querying an assigned neighbor load processor;
- (e2) broadcasting the variable in a Transmission Control Protocol format;
- (e3) broadcasting the variable in a User Datagram Protocol format; and
- (e4) combinations thereof.

36. The method of Claim 28 wherein one of said requests corresponds to a source address, the method further comprising the step (f) of distributing subsequent IP requests corresponding to the source address to the same of the first and second processors as the one of said requests.

37. The method of Claim 36 wherein the step (f) comprises directing subsequent IP requests in response to the application.

38. A network architecture for redirecting network traffic, the architecture comprising:

- (a) a plurality of geographically disparate address processors in a plurality of network traffic paths, wherein each of said address processors is operable to receive load information from any of said other address processors;
- (b) a plurality of application servers operatively connected to the plurality of network traffic paths, the application servers applying, in part, substantially the same application; and
- (c) wherein the address processors direct network traffic to particular application servers in response to said load information.

39. The architecture of Claim 38 wherein the address processors are associated with network access points.

40. The architecture of Claim 38 wherein the plurality of application servers comprise geographically disparate application servers.

41. The architecture of Claim 40:
further comprising an additional address processor associated with each geographical
disparate application server;
wherein each geographical disparate application server comprises a plurality of additional
application servers applying, in part, the substantially the same application; and
wherein the additional address processors direct network traffic directed to the geographical
disparate application servers to particular additional application servers in response to additional
application server load information.

42. The architecture of Claim 38 wherein the load information comprises a plurality
of variables, each variable associated with one of the plurality of application servers.

43. The architecture of Claim 41 wherein the additional application server load
information comprises Management Information Base (MIB) data.

44. The architecture of Claim 41 wherein the load information is shared between the
plurality of address processors and the plurality of additional address processors by a means
selected from the group of: means for querying an assigned neighbor address processor, means
for querying an assigned additional address processor, means for broadcasting load information
in a Transmission Control Protocol format, means for broadcasting load information in a User
Datagram Protocol format, and combinations thereof.

45. A method for redirecting network traffic in a network, the method comprising the steps of:

- (a) routing at least first and second network traffic datagrams through at least first and second address processors, respectively, in at least first and second network traffic paths, respectively, wherein said second address processor is operable to receive load information from said first address processor and wherein said second address processor is located at a geographically disparate location from said first address processor;
- (b) applying, in part, substantially the same application with at least first and second application servers, each of the first and second application servers operatively connected to the first and second network traffic paths; and
- (c) directing with the first and second address processors the first and second network traffic datagrams to one of the first and second application servers in response to said load information.

46. The method of Claim 45 wherein the step (a) comprises routing the at least first and second network traffic datagrams through the at least first and second address processors, respectively, associated with first and second network access points, respectively.

47. The method of Claim 45 wherein the first and second application servers comprise geographically disparate application servers.

48. The method of Claim 47:

further comprising the step of (d) providing an additional address processor associated with each geographical disparate application server;

wherein the first and second application servers each comprise a plurality of additional application servers applying, in part, the substantially the same application; and

further comprising the step (e) of directing any of the at least the first and second IP traffic datagram directed to each of the geographical disparate application servers to a particular one of the associated additional application servers in response to additional application server load information.

49. The method of Claim 45 wherein said load information comprises at least a first variable and a second variable associated with the first and second application servers, respectively.

50. The method of Claim 49 wherein the first and second variables are selected from the group of: a data rate, availability, round trip time information, and combinations thereof.

51. The method of Claim 48 wherein the additional application server load information comprises Management Information Base (MIB) data.

52. The method of Claim 51 wherein said MIB data comprises data selected from the group of: availability, processor usage, data storage usage and combinations thereof.

53. The method of Claim 48 further comprising the step (f) of sharing load information between the first, second and additional address processors by a method selected from the group of:

- (f1) querying an assigned neighbor address processor;
- (f2) querying an assigned additional address processor;
- (f3) broadcasting load information in a Transmission Control Protocol format;
- (f4) broadcasting load information in a User Datagram Protocol format; and
- (f5) combinations thereof.